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# ISD NEWS AND VIEWS

A PUBLICATION OF THE INFORMATION CENTER BUREAU

MONTANA DEPARTMENT OF ADMINISTRATION

INFORMATION SERVICES DIVISION

MAY, 1985

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THIS ISSUE CONTAINS:

*VSAM*
*IBM TERM CONTRACT PRICE REDUCTION*
*PERSONAL COMPUTERS AND OFFICE AUTOMATION*
*COMPUTER TRIVIA*

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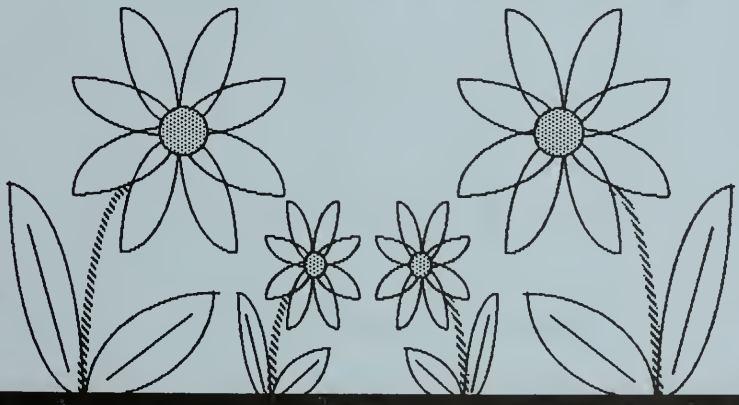

# lsd

# News And Views

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**DATE: MAY 8, 1985**

## MAINFRAME SECTION

### VSAM TIP

The latest release of VSAM (Virtual Storage Access Method) automatically does a verify at open time. There is no need to run a verify on a VSAM file. This allows you to eliminate this step in your job stream and saves you processing costs.

### 4381 REMINDER

The 4381 is to be used ONLY for the following applications.

- IDMS TEST CENTRAL VERSION
- TESTCICS
- TSO for accessing the IDMS TEST CV ONLY.
- Batch applications accessing IDMS TEST databases.
- ALTER

Using the 4381 for other purposes degrades the system and ties up resources.

### NEW CICS RELEASE

Production CICS was upgraded from release 1.5 to 1.6.0 on Friday, March 29, 1985.

This upgrade was necessary because we are planning to install ACF2 Security under CICS. ACF2 Security will not run under CICS version 1.5. Also, this upgrade standardized the CICS regions.

### SYSTEM SUMMARY

The following is a list of programming languages, software, and teleprocessing monitors available on the IBM 3033 central computer. For more information, contact the Information Center at 444-2973.

#### Programming Languages

1. VS/COBOL. The virtual storage version of COBOL which is an English-like algorithmic language designed primarily for business data processing applications.

2. FORTRAN/VS. An algorithmic source language used primarily to express mathematical terms and for solving mathematical data processing applications.

3. ASSEMBLER. OS Assembler H, Version 2

4. PL/1. (Programming Language One). A powerful programming language for advanced higher level language applications and systems. PL1 Optimizing Compiler is installed.

## Data Management Software

1. DYL260. A combination of data management system and report writer. Can handle multiple retrieval functions and allows non-data processing personnel to prepare reports on demand.

2. CULPRIT. A retrieval and report generator utility for data files and IDMS Databases.

## Statistical Analysis Software

1. SAS. Statistical Analysis System with Econometrics and Time Series and Full Screen Product.

2. SPSS. (Statistical Program for the Social Sciences). An integrated system of computer programs for the analysis of statistical data.

3. BMD and BMDP. UCLA Health Computing Center statistical packages for the biological sciences. Versions through 1977.

## Database Management Software

1. IDMS. (Integrated Data Management System). The basic DBMS software for building databases, and for providing recovery mechanisms, data security and integrity.

2. IDD. (Integrated Data Dictionary). Contains data descriptions and relationships between records. Can be used in database and non-database files.

3. OLQ. (On-Line-Query). An online reporting system for producing simple or complex reports from an IDMS database by means of search criteria. Requires IDMS background.

## Other Software

1. ADS/ONLINE. Application Development System. It allows users to develop and execute online applications.

2. ATMS. Mainframe Word Processing Software.

3. PANVALET. Program Library Utility.

4. CAPEX. COBOL Optimizer.

5. SDSF. Spool Display and Search Facility.

## Teleprocessing Monitors

1. CICS. (Customer Information Control System) Release 1.6. IBM program product. Provides the interface between the Virtual Telecommunications Access Method (VTAM) and the user application program while supervising, controlling or verifying the operation of the application program.

2. TSO/ISPF. (Time Sharing Option /Interactive System Productivity Facility). Online job submittal, entry and edit program.

## TELEPROCESSING NETWORK RECONFIGURATION

Information Services Division is in the process of reconfiguring the state data communications network. This is a very large task and enormously complex. The reasons for the reconfiguration are to put the network in a better position for expansion and the consolidation with the Department of Justice Law Enforcement Network. With any project this complex, there are bound to be and there have been some problems. We are attempting to keep the service interruptions to a minimum.

Network Control has at least two people traveling the state doing installations and have been short staffed. They will probably be for another month. We know this combined with modem and line switching can effect the end-user. We are trying to keep up with all new installation and changes here in Helena and so far have done fairly well. We have about one month left in the reconfiguration.

Please be patient and accept our apologies for the interruptions. We are doing the best with the resources available. We will try to keep the impact at the lowest possible level and with a minimum of down time. Please remember that in the end the network will be in a better position to accommodate your needs. Thanks for your cooperation and help.

If you have any questions or comments, contact Dennis Sheline at 444-2869.

## MICROCOMPUTER SECTION

### TERM CONTRACT DEADLINE

If you want to order equipment from the term contract using FY85 funds, your purchase order and justification must be sent to Mary Olson in the Resource Management Unit by June 14, 1985. This deadline will allow ISD time to review and approve requests before the June 30th deadline.

### IBM TERM CONTRACT PRICE REDUCTION

IBM has announced a series of price reductions on equipment available from the term contract. The price changes are as follows:

| Machine Type | Model | Description | Purchase Price Old | Purchase Price New |
|---|---|---|---|---|
| 5150 | 176 | PC System Unit/Keyboard - 256K/ Two Dual-Sided Diskette Drives | $1694.00 | $1606.50 |
| 5160 | 086 | PC/XT System Unit/Keyboard- 256 K/10Mb Fixed Disk Drive/ One Dual Sided Diskette Drive | $3076.50 | $2726.50 |
| 5161 | 001 | PC Expansion Unit | $2016.00 | $1809.50 |
| 5161 | 002 | XT Expansion Unit | $1603.00 | $1463.00 |
| Feature Number | | | | |
| 2500 | | 10 Mb Fixed Disk | $976.50 | $836.50 |
| 2501 | | Fixed Disk Adapter | $413.00 | $346.50 |

### AT&T PRICE REDUCTION

AT&T has announced price reductions on some term contract items. For more details, contact John Cook from AT&T at 449-6600.

### INFORMATION CENTER SERVICES

The Information Center maintains expertise on microcomputers, spreadsheets, word processors, end-user computing support, other application packages, and training.

#### Microcomputer Support from the Information Center

The Information Center supports the following microcomputer software packages.

- CROSSTALK XVI -- asynchronous communications package

- WORDPERFECT Version 4.0 -- word processing package
- PFS: FILE and REPORT -- file management system
- LOTUS 1-2-3 -- spreadsheet package
- PC-DOS and MS-DOS -- microcomputer operating system

Support includes:

- The above software can be purchased from the Information Center.
- Installation is included in the purchase price.
- Demonstrations are available.
- Staff members are available to answer technical questions and assist in problem resolution.
- Training for this software is provided through the ISD training program. The current class schedule is listed in the "Training Schedule."

### Diskette Tutorials Available on loan from the Information Center include:

- Displaywrite II -- word processing package
- MS-DOS -- microcomputer operating system
- Typing Instructor -- improve your typing skills

Additional tutorials will be available in the future. Contact the Information Center at 444-2973.

## PERSONAL COMPUTERS AND OFFICE AUTOMATION

As we become more dependent upon computers, we have also become more vulnerable to the loss or damage to our computer systems and the information they contain. Significant security related procedures are in effect at the central computer site administered by the Information Services Division of the Department of Administration. Unlike host mainframe computers, these minicomputers and PC's are tools for individual users; they are compactly packaged as stand-alone systems and are transportable. The special combination of characteristics and capabilities which makes PC's such valuable productivity tools - large data processing capability, ease of use and compact size - also makes them a prime target for unauthorized access and use. To minimize the potential for misuse and security violations, ISD has published this document of suggested practices.

### User Responsibility

Every user of a PC is responsible for protection of the data which the PC stores, processes or transmits. Physical access to a PC does not authorize

one employee to browse casually through another employee's data. All PC's purchased by the State of Montana remain state property and are to be used only for authorized activities. The State of Montana honors all licenses, copyrights, patents, restrictions and terms and conditions associated with commercial, proprietary computer software. Employees are not authorized to use, copy, modify or transfer purchased computer programs except as provided by the license, contract, or purchase agreement. "Pirating" (making unauthorized copies of software) is a violation of copyright laws and state policy.

Responsibility for the hardware, software and data involved with automation lies with the management of the agency owning, collecting and maintaining those resources.

Each Department of State Government has assigned individuals responsible for controlling access to their computerized data. These agency security officers are familiar with access controls required for the data and should be made aware of all resources being procured. Anyone not familiar with their departments security practices can get assistance by contacting the Department of Administration, Information Services Division Central Security Officer at 444-2860.

## Checklist of Security Considerations

1. Physical Security

   Any agency owning/operating PC equipment should take precautions to protect it from theft and physical damage. Protecting PC equipment is no different than protecting other office equipment except that the costs and their desirability are usually higher. A variety of lock-down devices are available which attach the PC and its components to other office furniture preventing easy theft and protect it from power surges and static electricity.

   To prevent unauthorized use, you usually control access by locking the terminal or placing it in a separate room or control the power source. Theft prevention is a big problem, especially with PC's as a ready market makes these systems attractive targets.

2. Access Control

   The public is becoming very concerned about privacy. Privacy is the right of individuals to decide what information they wish to share. Privacy laws have been passed in many states and at the federal government level. Most of these laws provide the following:

   - Letting people know what information is being kept and how it is supposed to be used.
   - A means of review and correction by the individual.
   - Prohibiting the record keeper from giving information to others without proper authorization.
   - Establishing a legal obligation on the part of the record keeper to maintain accuracy and prevent misuse of the information.

Supervisors and managers must ensure that only properly trained personnel operate a PC. Untrained persons are likely to create problems which could damage or destroy data and programs. When multiple users share a PC, the system Administrator must establish rules and controls to ensure that state information and equipment are properly handled. Each user is to be given access only to information for which he or she has a legitimate need. This can be accomplished either through physical control of data and program diskettes or through the use of software and hardware devices.

It is recommended that all PC media be locked in a desk or file cabinet when not in use. The proper storage of diskettes will prevent accidental damage to the media and the loss or theft of data and programs.

3. Network Controls

Networks of PC's require special considerations and agency management should take special precautions. The centralized computer facility controls access to its facility using software and hardware specifically designed for that purpose. Access is allowed on a controlled, validation basis.

For approval of outside access, contact the Department of Administration, Information Services Division.

4. Contingency Planning

Agency management should ensure that an organization will continue to function even if the PC equipment or data is destroyed or becomes unavailable. Backup plans should be made that ensure proper procedures are in place that provide protection for your vital records and programs. Backup copies of essential records should be stored in a location away from the primary use areas.

Equipment backup can be easily handled within state government if standardized equipment is installed that can be shared by all users.

5. Documentation

PC-generated applications should require complete documentation so that they can be easily recreated if destroyed. Documenting procedures is time consuming, but the possible loss of key information and processing potential justifies the effort.

## COMPUTER TRIVIA

Did you know that there are approximately 1116 terminals hooked up to the state network, including the justice network?

The first large-scale electronic digital computer was completed in 1946. The computer was called the ENIAC (Electronic Numberical Integrator and Computer). The ENIAC contained 18,000 vacuum tubes, weighed 30 tons, occupied a space 30 by 50 feet, and executed 333 instructions per second. The current state central computer was installed in 1981, uses solid state logic circuits, weighs 8150 pounds, is approximately 420 square feet, and executes 4,300,000 instructions per second. The 3033 is 13,000 times faster than the ENIAC.

## UPDATED TELEPHONE DIALING PLAN

In April, a new dialing plan was implemented for information calls. To get information, dial 9-1-411 or 9-1-555-1212. Long distance information calls are dialed preceded by 8, the area code and 555-1212.

Mountain Bell has increased the cost for information calls to $.30 per call. Therefore, each local information call will be billed back to the extension at a $.30 per minute flat rate.

Toll free numbers, 800 calls, are dialed preceded by 8.

Class of Service 4, COS4, phones, dial 8 + 0 for Bell operator assistance.

For further information, please call the Capitol Operator at extension 2511.

## INCREASING YOUR COMPUTER VOCABULARY

- Data Network
  - Often referred to as the state network or computer network; This network allows data to be sent/received from remote locations; It links various governmental locations to the central data center in Helena. It consists of two parts: devices that perform processing functions including exchanging data between computers and the communications link. This communications link is the means for exchanging data such as telephone lines.
- Microcomputer
  - a smaller computer; includes a Central Processing Unit (CPU), memory, and power supply

- Mainframe/Central Data Center/IBM 3033/Host Computer/Central Computer

  – Department of Administration's Central Computer; A large computer operated by Information Services Division located in the Mitchell Building in Helena.

## MINI SEMINARS

ISD is continuing its series of FREE, short mini seminars during May and June. All sessions will be held in Room 14 of the Mitchell Building. No pre-registration is necessary and a broadcast message will go out as a reminder.

- SDSF May 16, 1985 10 a.m. - noon

  For anyone submitting jobs thru SPF, this mini will demonstrate how to use SDSF to track submitted jobs thru the system, display job output, re-route output for printing and purge unwanted jobs.

- On-Line Authorization System May 29, 1985 10 a.m. - noon

  Users storing data on disk must have authorized space on the central system. This session will teach use of the "On-line Dataset Authorization System" and the allocate function of SPF so that users can create space without going thru ISD.

- SPF Utilities June 5, 1985 10 a.m. - noon

  This session demonstrates the four most used functions of the SPF Utilities (Option 3): Library, Dataset, Move/Copy and Catalog.

TRAINING SCHEDULE.

MAINFRAME CLASSES

INTRODUCTION TO DYL260 (ISD50): presented by Gary Wulf of the Information Center

| | |
|---|---|
| DATE: | May 22-May 23, 1985 |
| TIME: | 9:00 a.m. to 4:00 p.m. |
| PLACE: | ISD Education Center, Room 14, Mitchell Building |
| COST: | $100.00 |
| LIMIT: | 10 |
| PREREQUISITE: | Basic Terminal Skills or equivalent, JCL helpful but not required |
| CANCELLATION DATE: | May 15, 1985 |

DYL260 is three software packages in one: an extended utility, a data management system, and a report writer. Though normally a compile, load and go system, you may also store compiled programs in an executable library and run without recompilation if you wish, passing data to the program at run time.

Although it has the power and flexibility of a programming language, DYL260 is not intended as a replacement for an installation's standard programming languages. It is intended as a supplementary tool.

A DYL260 program can usually be coded (by providing parameters in fixed format) in a fraction of the time it takes to do the same problem in COBOL. It is ideal for those situations that require a quick response solution, such as one-time reports and file recoveries. It is equally useful in day-to-day data processing functions, such as file to file copy and backup, file dumps, and test file generation.

CICS COMMAND LEVEL PROGRAMMING (ISD45):presented by Ron Armstrong and Colin Jenkins of Technical Services

| | |
|---|---|
| DATE: | June 17 - June 21, 1985 |
| TIME: | 8:30 a.m. to 4:00 p.m. |
| PLACE: | ISD Education Center, Room 14, Mitchell Building |
| COST: | $150.00 |
| LIMIT: | 8 |
| PREREQUISITE: | Basic Terminal Skills or equivalent terminal experience, COBOL experience, and CLEVEL, IIS class on command level programming (self-paced, approx. 20 hours) |
| CANCELLATION DATE: | June 10, 1985 |

This class is structured to teach the basic skills necessary to design, code and test CICS programs. In addition to covering the basics of command level coding itself, an emphasis will be placed on workable examples and standards as they exist in the ISD Data Center. Class projects will give each student experience in designing, coding, modifying, testing and debugging an actual CICS transaction. It is assumed that all students are proficient in batch type programming.

The following manuals are included in the class fee:

- CICS Version 1, Rel. 6, Application Programming Primer Volume 1 (5740-XX1)
- CICS Version 1, Rel. 6, Application Programming Primer Volume 2 (5740-XX1)

The following manuals must be provided by the student. If they are unavailable through your agency, they can be purchased through the Information Center.

- CICS Application Programmers Reference Manual $33.00
- CICS Program Debugging Reference Summary $1.90

Please call Wendy or Sheila at 444-2973 to sign up for the IIS prerequisite or purchase manuals.

**BASIC TERMINAL SKILLS (ISD12):** presented by Wendy Wheeler of the Information Center

| | |
|---|---|
| **DATE:** | June 28, 1985 |
| **TIME:** | 8:30 a.m. to 4:00 p.m. |
| **PLACE:** | ISD Education Center, Room 14, Mitchell Building |
| **COST:** | $50.00 |
| **LIMIT:** | 8 |
| **PREREQUISITE:** | 3270nd (IIS class on terminal operation) |
| **CANCELLATION DATE:** | June 21, 1985 |

Learn the basics of using a computer terminal. Become confident manipulating data using the SPF editor. Learn how to use the more common SPF Utilities. Know how to check your job status and output using SDSF. This course is a prerequisite for many other ISD classes.

## MICROCOMPUTER CLASSES

**BEGINNING MICROCOMPUTER SKILLS (OA02):** presented by the staff of the Information Center

| | |
|---|---|
| DATE: | June 24, 1985 |
| CANCELLATION DATE: | June 17, 1985 |
| DATE: | June 27, 1985 |
| CANCELLATION DATE: | June 20, 1985 |
| TIME: | 8:30 a.m. to 4:30 p.m. |
| PLACE: | ISD Education Center, Room 14, Mitchell Building |
| COST: | $50.00 |
| LIMIT: | 8 |
| PREREQUISITE: | None |

This course will give participants brief hands on experience with microcomputers. Topics to be covered:

- The machine
- The operating system
- Word processing
- Spreadsheets and graphics
- Data management
- Communications

All class time will be spent using microcomputers and software. The participant will learn what microcomputers can do and how to approach them. They will become familiar with the system. This course or its equivalent will be a prerequisite for many future microcomputer courses.

**INTRODUCTION TO LOTUS 1-2-3 (OA12):** presented by Wendy Wheeler of the Information Center

| | |
|---|---|
| DATE: | June 25, 1985 |
| TIME: | 8:30 a.m. to 4:30 p.m. |
| PLACE: | ISD Education Center, Room 14, Mitchell Building |
| CANCELLATION DATE: | June 18, 1985 |
| COST: | $50.00 |
| LIMIT: | 8 |
| PREREQUISITE: | Beginning Microcomputer Skills (OA02) |

This course is designed for anyone with little or no previous 1-2-3 or microcomputing experience.

Introduction to LOTUS 1-2-3 will concentrate on 1-2-3 spreadsheet commands, design and basic what-if analysis. The more advanced features such as macro programming, one and two-way sensitivity analysis tables and database commands will be covered in the advanced course.

Class format consists of lecture and hands-on practice followed by lab time for further experience.

**LOTUS 1-2-3 Advanced Features (OA21):** presented by Ron Heilman of the Information Center

| | |
|---|---|
| DATE: | June 26, 1985 |
| TIME: | 8:30 a.m. to 4:30 p.m. |
| PLACE: | ISD Education Center, Room 14, Mitchell Building |
| CANCELLATION DATE: | June 19, 1985 |
| COST: | $50.00 |
| LIMIT: | 12 |
| PREREQUISITE: | Introduction to LOTUS (OA12) or equivalent knowledge and Beginning Microcomputer Skills (OA02) |

This course is designed for anyone who is using 1-2-3 for basic spreadsheet work. Features not covered in the introductory class will be included. Advanced features such as macro programming, one and two-way sensitivity analysis tables and data base commands will be covered in detail.

Class consists of lecture, hands-on practice, lab work or question and answer period if time permits.

**INTRODUCTION TO PFS: FILE AND REPORT (OA30):** presented by Wendy Wheeler of the Information Center

| | |
|---|---|
| DATE: | June 3, 1985 |
| TIME: | 8:30 a.m. to 4:30 p.m. |
| PLACE: | ISD Education Center, Room 14, Mitchell Building |
| COST: | $50.00 |
| LIMIT: | 8 |
| PREREQUISITE: | Beginning Microcomputer Skills (OA02) |
| CANCELLATION DATE: | May 29, 1985 |

**Note:** The PFS class scheduled for May 17 has been postponed to this date.

PFS:FILE and REPORT are two easy to use, interrelated software packages.

FILE allows you flexibility in storing and retrieving information. Format design is simple and the program allows you to review, update, or print selected forms.

REPORT provides the capability of creating tabular reports from your existing PFS files.

Please call Wendy or Sheila in the Information Center (444-2973) if you have questions on the schedule.

To register for classes, please complete the following enrollment form and return it to Information Services.

FULL CLASS FEE WILL BE BILLED TO THE REGISTRANT UNLESS CANCELLATIONS ARE MADE BY THE DEADLINE LISTED FOR EACH CLASS.

ISD ENROLLMENT APPLICATION
(FOR ALL COURSES)

PLEASE COMPLETE THE FOLLOWING APPLICATION AND RETURN
TO INFORMATION SERVICES DIVISION

COURSE: _____

DATE: _____

STUDENT: _____

AGENCY/DIVISION _____

PHONE: _____

ISD BILLING NO: _____

SOC SEC NO (FOR P/P/P): _____

AUTHORIZED SIGNATURE: _____

HAVE YOU MET THE PREREQUISITES FOR THIS COURSE? PLEASE EXPLAIN GIVING JOB EXPERIENCE OR CLASS WHEN APPLICABLE

_____

_____

_____